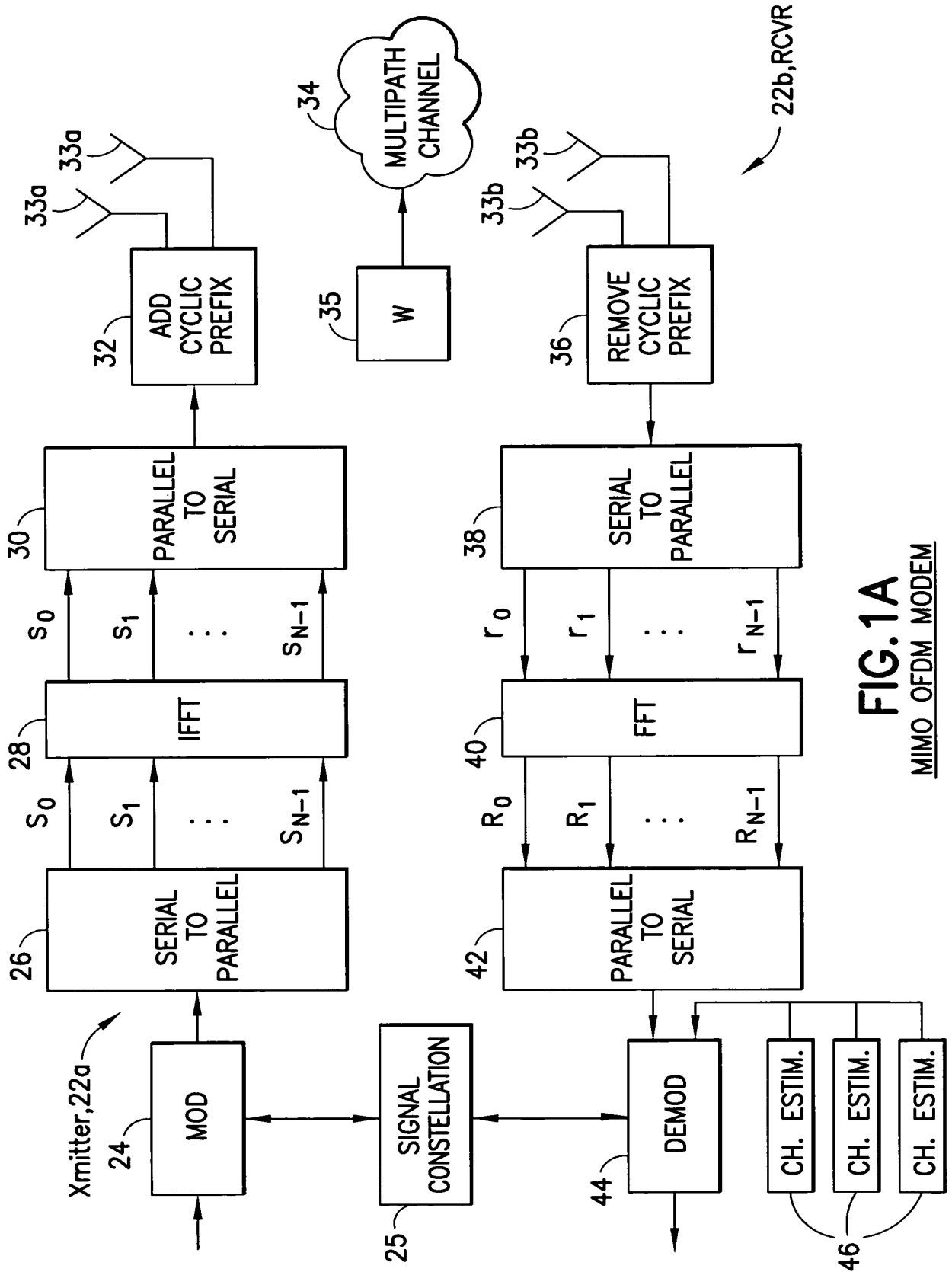
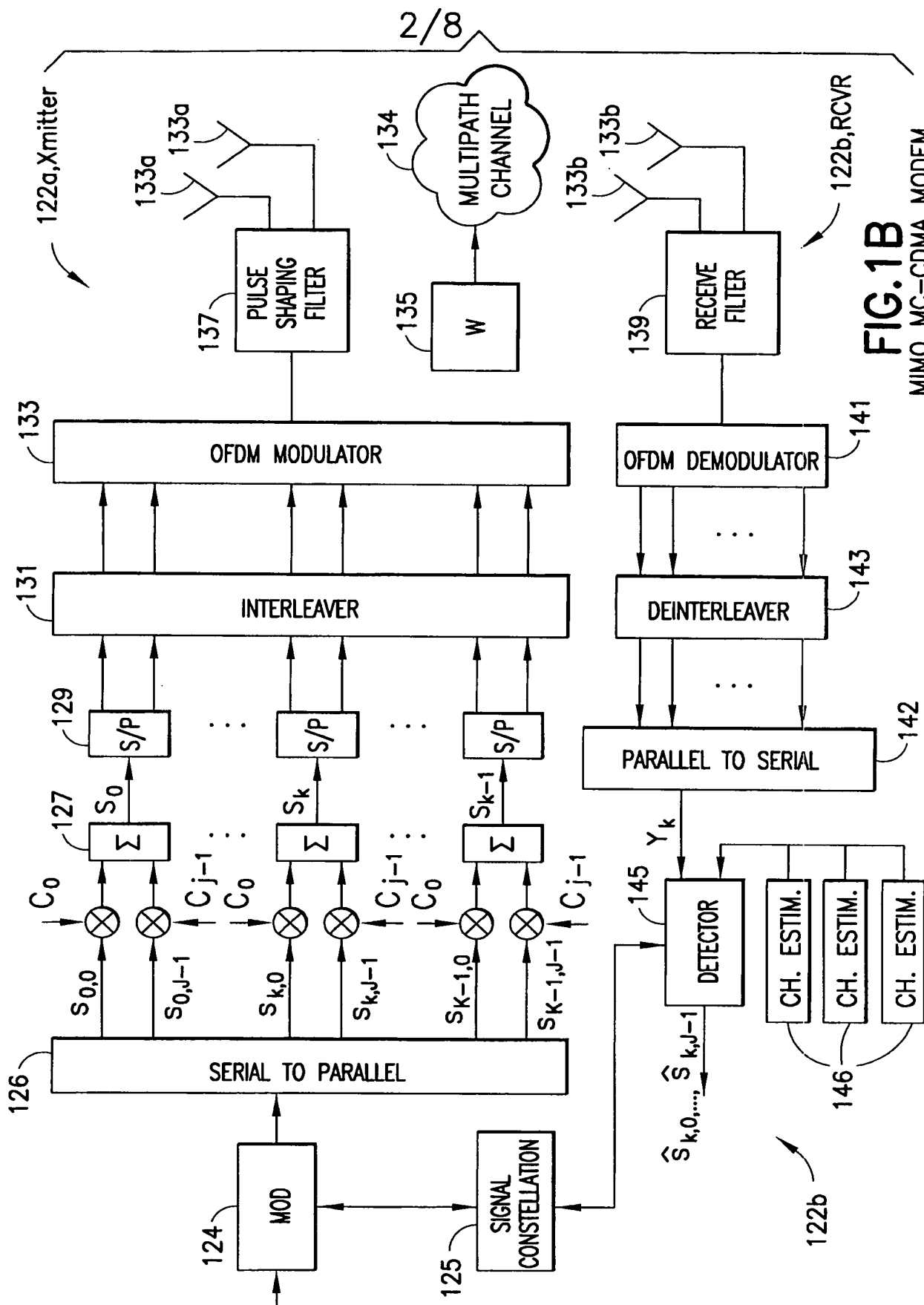




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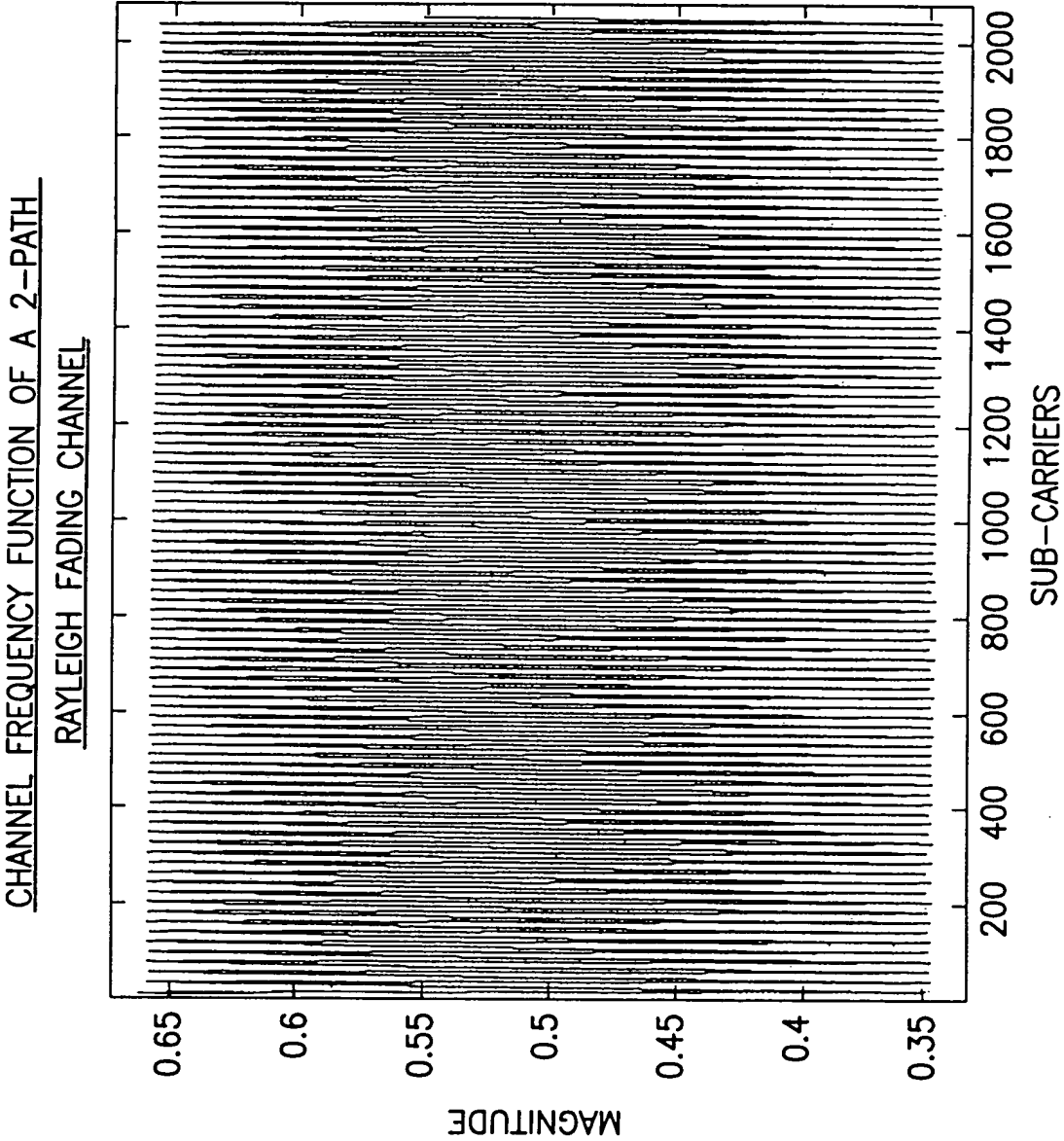
**FIG. 1A**  
 MIMO OFDM MODEM



**FIG. 1B**

MIMO MC-CDMA MODEM

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**FIG.2**  
PRIOR ART

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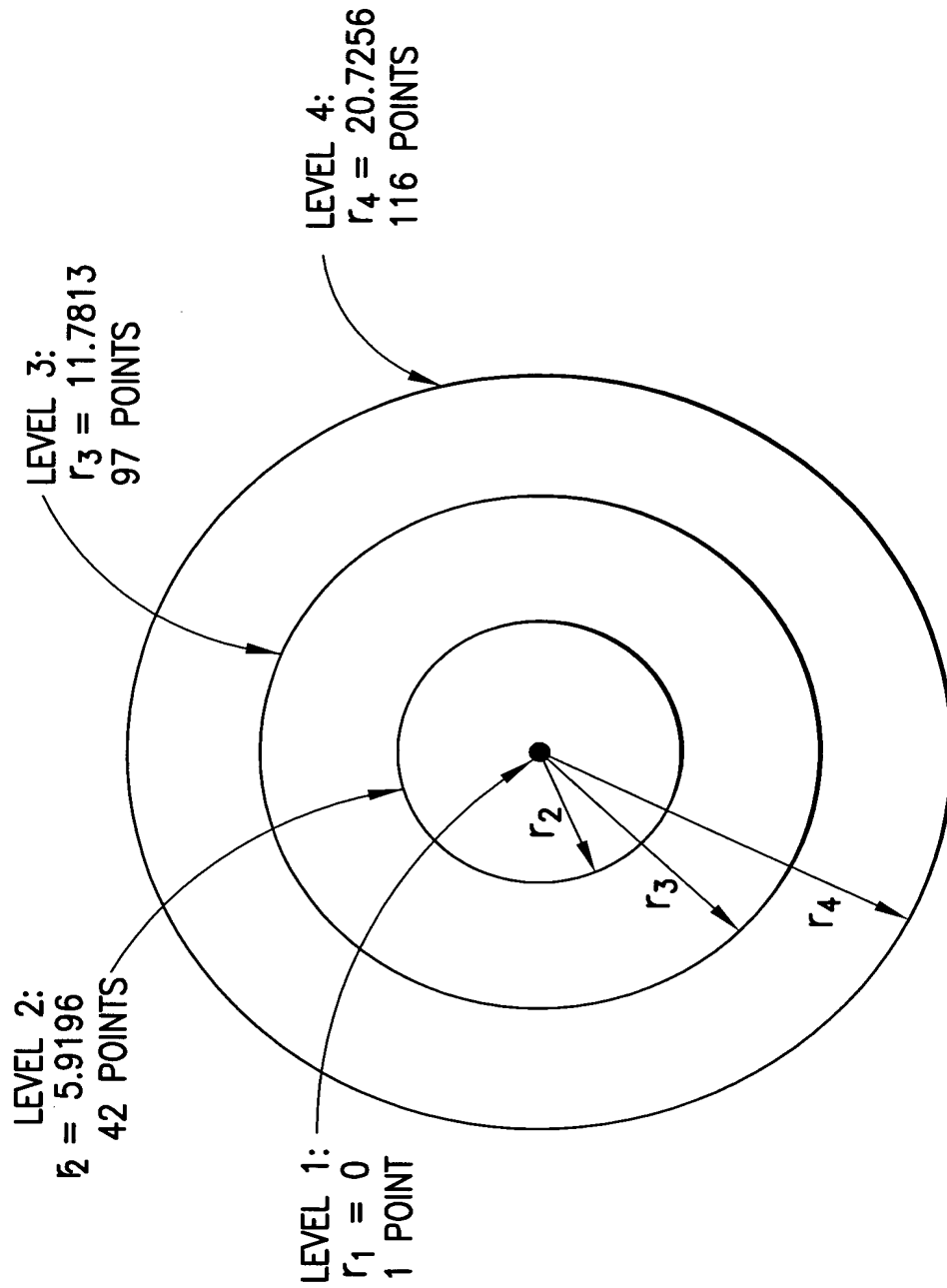


FIG.3

2x2, 1 C, 128 SC, 16QAM, SF 4, 1 UpB, 8 PILOTS, Ppilot =1.0,  
OFl, No P SF, 4 SpC, 20 CP, BLOCK Veh A, 5-TAP LS

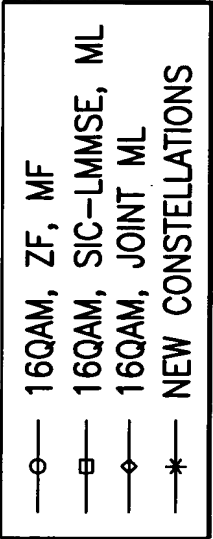
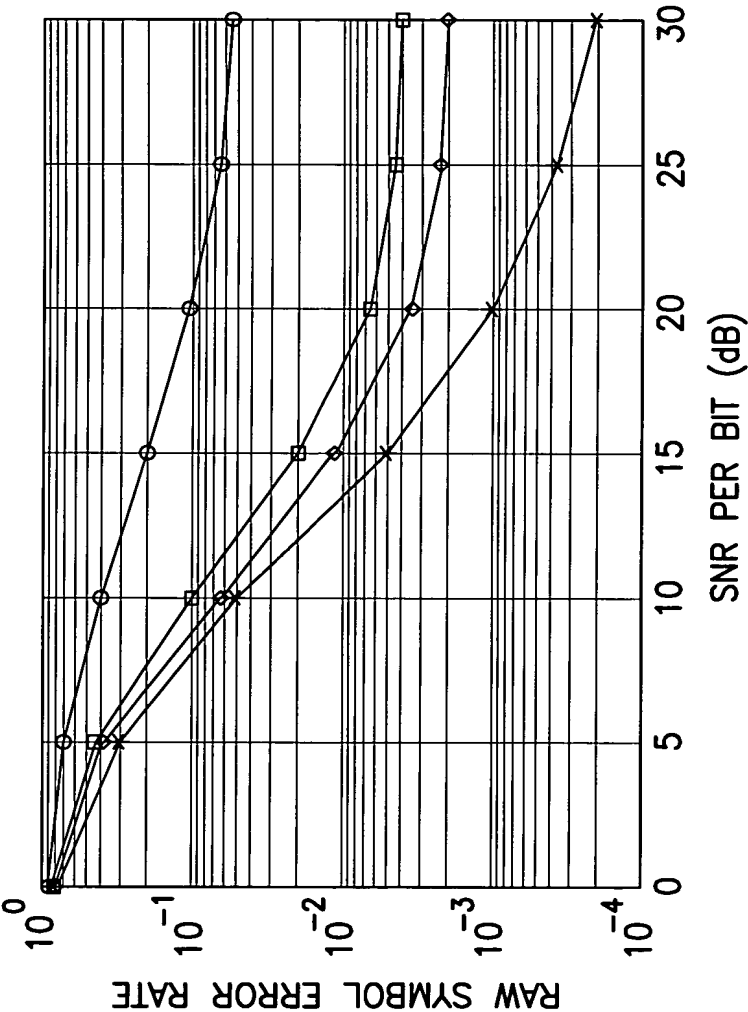
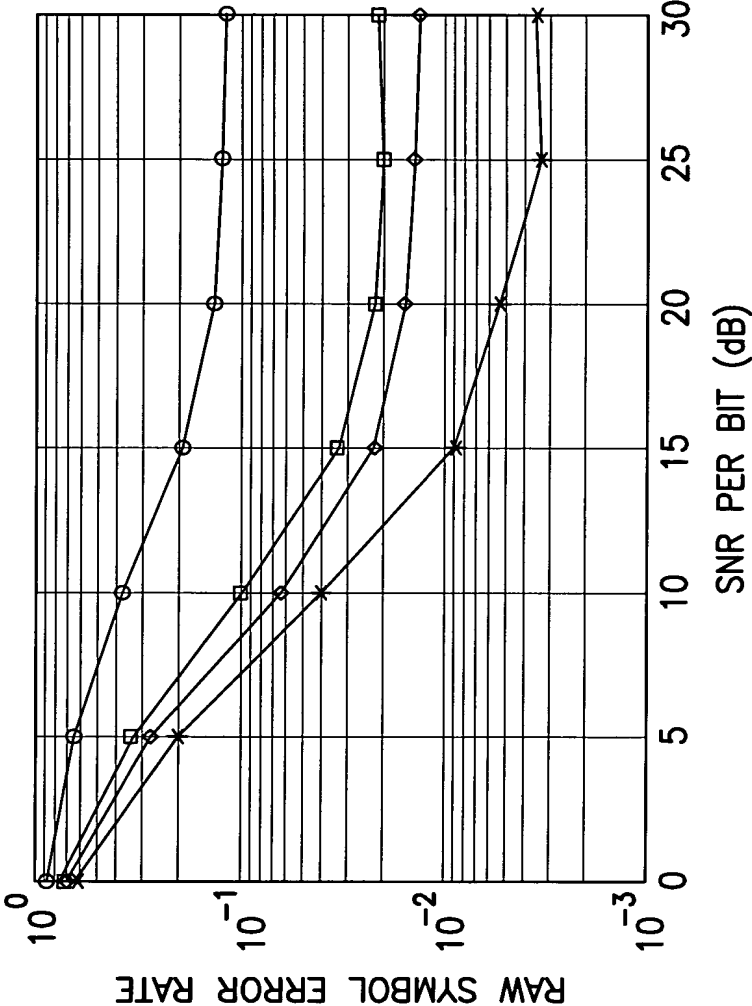


FIG.4A

2x2, 1 C, 128 SC, 16QAM, SF 4, 1 UpB, 8 PILOTS, Ppilot =1.0,  
OFI, No P SF, 4 SpC, 20 CP, Veh A, 120.0 Km/h, 5-TAP LS



- 16QAM, ZF, MF
- 16QAM, SIC-LMMSE, ML
- ◇— 16QAM, JOINT ML
- \*— NEW CONSTELLATIONS

FIG.4B

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2x2, 1 C, 128 SC, 16QAM, PURE OFDM, 8 PILOTS, Ppilot =1.0,  
 OFI, No P SF, 4 SpC, 20 CP, BLOCK Veh A, 5-TAP LS

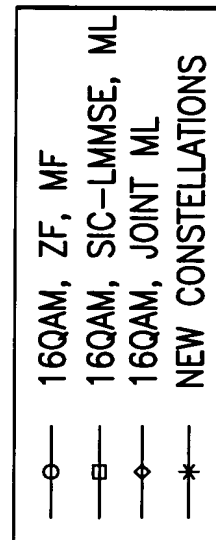
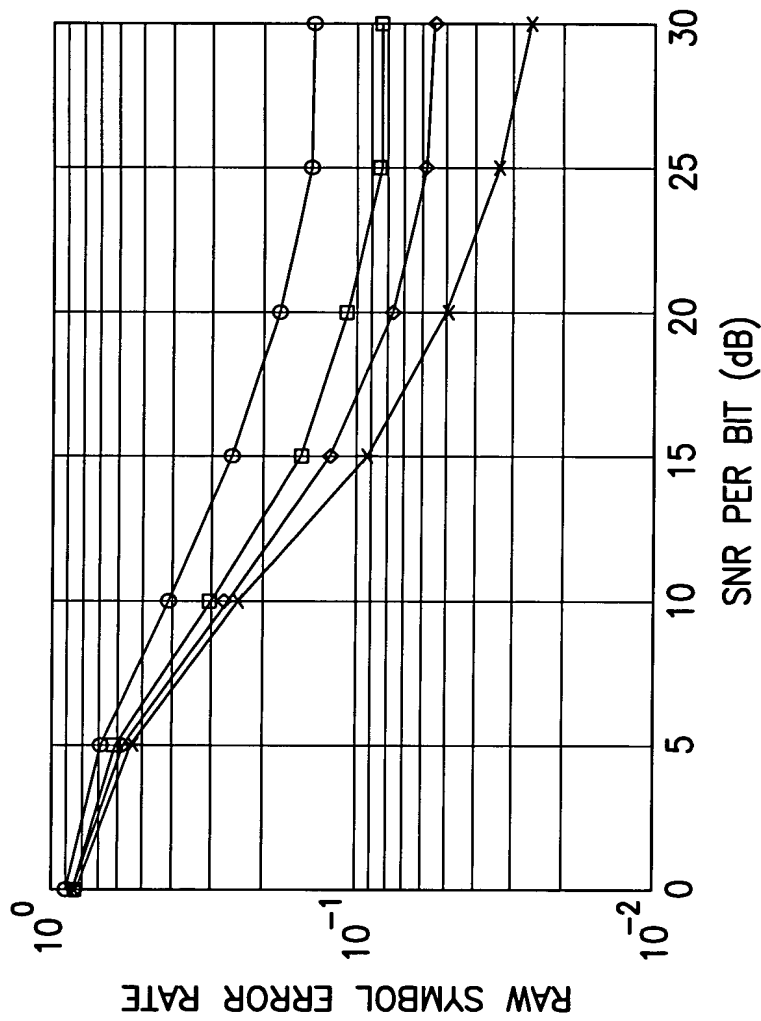


FIG.5A

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2x2, 1 C, 128 SC, 16QAM, PURE OFDM, 8 PILOTS, Ppilot =1.0  
OFI, No P SF, 4 SpC, 20 CP, Veh A, 120.0 Km/h, 5-TAP LS

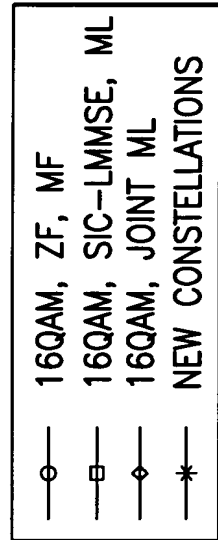
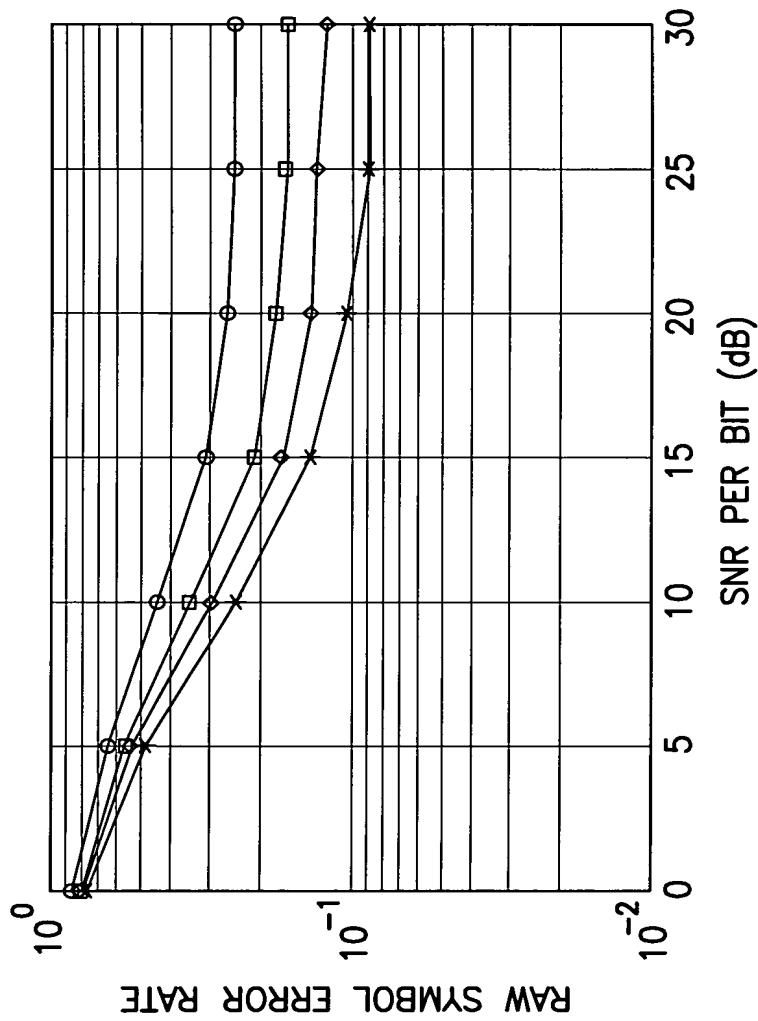


FIG. 5B